



STANDARD®

STANDARD AMATEUR RADIO PRODUCTS, INC.

P.O. Box 48480 NILES, ILLINOIS 60714

(773) 763-0081 phone

(773) 763-3377 fax

StdAmat@aol.com e-mail

STANDARD DEALERS

Amateur Elect Supply
5710 W. Good Hope Road
Milwaukee, WI 53223
(800) 558-0411
(414) 358-0333

Amateur Elect Supply
28940 Euclid Ave.
Wickliffe, OH 44092
(800) 321-3594
(216) 585-7388

Amateur Elect Supply
14100 U.S. 19 N. Unit 124
Clearwater, FL 34624
(888) 226-7388
(813) 539-7348

Amateur Elect Supply
1072 N. Rancho Dr.
Las Vegas, NV 89106
(800) 634-6227
(702) 647-3114

Amateur Elect Supply
621 Commonwealth Ave
Orlando, FL 32803
(800) 327-1917
(407) 894-3238

RAD-COM Radio
3300 82nd Street, Suite E
Lubbock, TX 79423
(806) 792-3669

Burghardt Ctr
182 N. Maple
Watertown, SD 57201
(800) 927-4261
(605) 886-7314

Eli's Amateur Radio
2513 S.W. 9 Avenue
Fort Lauderdale, FL 33315
(305) 525-0103

Ham Radio Outlet
1509 N. Dupont Hwy #7
New Castle, DE 19720
(800) 644-4476
(302) 322-7092

Ham Radio Outlet
1939 W. Dunlap Ave.
Phoenix, AZ 85012
(800) 444-9476
(602) 242-3515

Ham Radio Outlet
933 N Euclid Street
Anaheim, CA 92801
(800) 854-6046
(714) 533-7373

Ham Radio Outlet
11705 SW Pacific Hwy
Portland, OR 97223
(800) 854-6046
(503) 598-0555

Ham Radio Outlet
2210 Livingston Street
Oakland, CA 94606
(800) 854-6046
(510) 534-5757

Ham Radio Outlet
5375 Kearny Villa
San Diego, CA 92123
(800) 854-6046
(619) 560-4900

Ham Radio Outlet
510 Lawrence Exp
Sunnyvale, CA 94086
(800) 854-6046
(408) 736-9496

Ham Radio Outlet
2492 W. Victory Blvd
Burbank, CA 91506
(800) 854-6046
(818) 842-1786

Ham Radio Outlet
8400 E Liff Ave. #9
Denver, CO 80231
(800) 444-9476
(303) 745-7373

Ham Radio Outlet
6071 Buford Hwy
Atlanta, GA 30340
(800) 444-7927
(770) 263-0700

Ham Radio Outlet
224 N Broadway
Salem, NH 03079
(800) 444-0047
(603) 898-3750

Ham Radio Outlet
14803 Build America Dr.
Woodbridge, VA 22191
(800) 444-4799
(703) 643-1063

the Ham Station
220 N Fulton Avenue
Evansville, IN 47719
(800) 729-4373
(812) 422-0231

The Communication Source
2713 Galleria Dr.
Arlington, TX 76011
(817) 640-1663

Henry Radio
2050 S. Bundy Drive
Los Angeles, CA 90025
(800) 877-7979
(310) 820-1234

North Olmsted Radio
29460 Lorain Rd
North Olmsted, OH 44070
(216) 777-9460

Lentini Comm.
21 Garfield St
Newington, CT 06111
(800) 666-0908
(860) 666-6227

For Hams Only
12123 1/2 Frankstown Rd.
Pittsburgh, PA 15235
(800) 854-0815
(412) 793-3939

R & L Electronics
1315 Maple Ave
Hamilton, OH 45011
(800) 221-7735
(513) 868-6399

Communications Data
1051 Main Street
St. Joseph, MI 49085
(800) 382-2562
(616) 982-0404

Universal Radio
6830 Americana Parkway
Reynoldsburg, OH 43068
(800) 431-3939
(614) 866-4267

Burk Electronics
35 N. Kensington
LaGrange, IL 60525
(708) 482-9310

Michigan Radio
23040 Schoenherr
Warren, MI 48089
(800) 878-4266
(810) 771-4711

Ham Radio Toy Store
117 W. Wesley
Wheaton, IL 60187
(708) 668-9577

Over

ELKEL Ltee
2435 Boul Des Recollets
Trois Revieres, Quebec
CANADA G8Z 4G1
(819) 378-5457

Radio Depot
2135 Sheridan Rd. Suite A
Bremerton, WA 98310
(800) 291-9067
(360) 377-9067

Texas Towers
1108 Summit Ave Suite 4
Plano, TX 75074
(800) 272-3467
(214) 422-7306

C and S Sales
1245 Rosewood
Deerfield, IL 60015
(800) 292-7711
(847) 541-0710

Burnaby Radio Comm Ltd.
4257 E. Hastings St.
Burnaby, BC V5C 2J5
CANADA
(604) 298-5444

Jun's Electronics
5563 Sepulveda Blvd
Culver City, CA 90201
(800) 882-1343
(310) 390-8003

Ray's Amateur Electronics
1701-G N. Main Street
High Point, NC 27262
(800) 845-5338
(910) 883-6038

Norham Radio Inc.
4373 Steeles Avenue W.
North York, Ont. M3N 1V7
CANADA
(416) 667-1000

Electrolc Equipment Bank
323 Mill Street
Vienna, VA 22180
(800) 368-3270
(703) 938-3350

Ross Distributing
78 S. State
Preston, ID 83263
(208) 852-0830

Hardin Electronics
5635 E. Rosedale
Fort Worth, TX 76112
(800) 433-3203
(817) 429-9761

Amateur Radio Supply
5963 Corson Ave South 140
Seattle, WA 98108
(800) 426-6528
(206) 767-3222

Associated Radio Comm
8012 Conser
Overland Park, KS 66204
(800) 497-1457
(913) 381-5900

RT Systems
8207 Stephanie Drive
Huntsville, AL 35802
(800) 723-6922
(205) 882-9292

Barry Electronics
540 Broadway
New York, NY 10012
(212) 925-7000

International Radio
5001 NW 72nd Avenue
Miami, FL 33166
(305) 594-4313



STANDARD[®]



VHF-UHF WIDE – BAND 50.000 – 904.995 MHZ SPECTRAL DISPLAY SCOPE COMMUNICATIONS TEST RECEIVER CCR708A

- Continuous full coverage: 50–904.995 MHz.
- Receiving mode: Amplitude Modulation (AM), Narrow Band Frequency Modulation (N-FM), Wide band Frequency Modulation (W-FM).
- High precision/high stability PLL synthesizer.
- Microprocessor controlled.
- 100 storage channels for quick frequency reference—direct entry.
- 120 volt 60 Hz wall transformer included.
- Ideal for the service bench.
- Compact size—perfect for portable field use.
- Equipped with a LCD spectral display scope used for evaluating signal strength and tracking down nearby interfering signals.
- Extremely well built to industry standards.
- Its versatility/portability allows the technician to evaluate other equipment.
- Supplied with a telescoping antenna.

For more information on this and other STANDARD products, contact your nearest dealer or call STANDARD Amateur Radio Products at: (312) 763-0081. Specifications, price, and features are subject to change without obligation or notice. All products carry a ONE YEAR limited warranty.

STANDARD Amateur Radio Products, Inc.
P.O. Box 48480 • Niles, Illinois 60648



STANDARD[®]



STANDARD®

SPECIFICATIONS CCR708A COMMUNICATIONS TEST RECEIVER

| | |
|--|--|
| Frequency Range | 50-904.995 MHz |
| Type of Emission | AM |
| | FM Narrow..... ± 5.0 kHz |
| | FM Wide..... ± 75 kHz |
| Intermediate Frequency | 1st IF.....46 MHz |
| | 2nd IF.....10.7 MHz |
| | 3rd IF.....455 MHz (AM, FM Narrow) |
| Sensitivity | AM (10dB S/N).....Less than 3 μ V |
| | FM Narrow (12dB SINAD).....Less than 1.5 μ V |
| | FM Wide (12dB SINAD)....Less than 1 μ V at 83 MHz |
| Frequency Stability | Less than $\pm 0.0002\%$ (at 454 MHz) |
| Squelch Sensitivity | Less than 0.2 μ V (FM Narrow) |
| Selectivity | More than 30dB (2 Signal method) |
| Spurious Response | 1st Image Response...More than 40dB (FM Narrow) |
| |More than 36dB (AM, FM Wide) |
| | 2nd Image Response.....More than 50dB |
| | 3rd Image Response...More than 50dB (FM Narrow) |
| Frequency Step | 10kHz, 12.5kHz, 20kHz, 25kHz |
| | Adjust Mode 5kHz, Up/Down 1kHz |
| Storage Channels | 100 Channels |
| Audio Output | External Speaker jack.....More than 1.8 Watts |
| | (8 Ohm, 10% Distortion, Input signal FM 1 kHz \pm 3.5 kHz Deviation) |
| | REC jack.....30mV (100k Ohm load) |
| | 8 Volt Output jack.....8V (40mA maximum) |
| Antenna Connector Impedance | 50 Ohms BNC (telescoping antenna included) |
| Current Drain | 1 Amp (at 1.5 Watt AF power output) |
| Power Requirement | 13.8 Volt DC \pm 15% |
| Power Supply (included) | 120V/60Hz Wall Transformer |
| Grounding | Negative |
| Operating Temperature Range | 0 to 50 degrees C |
| Dimensions (excluding projections) | 7.09 (W) x2.95 (H) x7.09 (D) inches |
| Weight | 4.63 lb (including antenna and stand) |

STANDARD reserves the right to discontinue products and change specifications at any time without incurring any obligation to incorporate new features into products previously sold. All products carry a full one year limited warranty from time of purchase.

December 4, 1992

WHAT TWIN-BAND RADIO'S SPEAKER-MIC DISPLAYS BOTH BANDS WHILE DELIVERING UP TO 50 WATTS?

The Standard C5718DA of course; the smallest, lowest price twin-band mobile radio that delivers all the features. Operate the C5718DA from its optional snap-on front panel with twin frequency display (CRC5700) or mount it under a seat or even in the trunk using the optional extension cable (CAW571 or CAW572).



- Unsurpassed intermod rejection.
- Built in Antenna Duplexer.
- Dual-frequency receive; two VHF, Two UHF, or VHF/UHF.
- Frequency Range: Receives 110-199.995 MHz (including AM aircraft) and 250-499.995 MHz.
- 50 Watts 2M, 40 Watts 70cm (3W Low, 10W Medium selectable)
- Memories: 40 memories (20 per band); stores frequency, offsets and CTCSS tones.
- 200 memory channel option, CMU182.
- CTCSS Encode/Decode standard.
- Frequency steps, 5, 10, 12.5, 15, 20, 25, 50 and 100 KHz.
- Full Duplex cross band operation with CTCSS tones.
- Paging/Coded squelch.
- DTMF autopatch dialing, 10 memories per band, 15 digits.
- Eight kinds of scan, including priority and CTCSS.
- Back-lit Keypad and Display
- Auto mute opposite band, three settings (-6, -12 and -18dB).
- Cooling fan built-in.
- Size: 5.51"W 1.57"H 5.31"D
- Weight 2.2 lbs
- Mobile bracket and power cord (2M) included.
- MARS and CAP modification available (permit required).

STANDARD PIONEERS ANOTHER FIRST!! THE C5718DA IS PACKET READY.

Designed with packet in mind. Out-of-the-box high-speed, 9600 baud, interface for both VHF and UHF bands. Just connect your TNC to the C5718DA and you're on the high speed packet network. Also, operates at 1200 and 2400 baud equally well.



OPTIONAL ACCESSORIES

CRC5700 removable front panel with twin frequency display.
CAW570 split cable for mic.
CAW571 2M mic extension cable.
CAW572 4M mic extension cable.
CAW573 2M extension cable for the front panel (CRC5700).
CAW574 4M extension cable for the front panel (CRC5700).
Additional accessories available from your dealer.



STANDARD®

For more information on this and other STANDARD products, please contact your nearest STANDARD dealer. Specifications, price and features are subject to change without obligation or notice.
Standard Amateur Radio Products, Inc.
P.O. Box 48480
Niles, Illinois 60714
tel (312) 763-0081
fax (312) 763-3377



SPECIFICATIONS STANDARD C5718DA TWIN BAND 146/440 MHz MOBILE TRANSCEIVER WITH FULL REMOTE CONTROL MICROPHONE

GENERAL:

Frequency Range (5KHz steps, minimum)
Receiver 146 MHz: 110 to 199.995 MHz*
(including AM aircraft)
440 MHz: 250 to 499.995 MHz*
Unsurpassed intermod rejection.
Built in Antenna Duplexer.
Dual-frequency receive; two VHF, two UHF, or VHF/UHF.
Memories:
40 memories (20 per band); stores frequency, offsets and CTCSS tones.
200 memory channel option, CMU182.
CTCSS Encode\Decode standard.
Frequency steps, 5, 10, 12.5, 15, 20, 25, 50 and 100 Khz.
Full Duplex cross band operation with CTCSS tones.
Paging\Coded squelch.
DTMF autopatch dialing, 10 memories per band, 15 digits.
Eight kinds of scan, including priority and CTCSS.
Back-lit Keypad and Display
Auto mute opposite band, three settings (-6, -12 and -18dB).
Cooling fan built-in.
Size: 5.51"W 1.57"H 5.31"D
Weight 2.2 lbs
Mobile bracket and power cord (2M) included.
MARS and CAP modification available (permit required).

RECEIVER:

Receiver Double Conversion Superhet
First IF 146 MHz: 44.95 MHz
440 MHz: 23.05 MHz
Second IF 455 KHz
Sensitivity (within amateur bands)
0.158 uV for 12dB SINAD
Squelch Sensitivity Threshold 0.112uV
Selectivity (2 signal method)
VHF: 60dB UHF: 55dB
Signal-to-noise ratio (at 0.5uV input)
30 dB or better
Audio Output 2 Watts into 4 ohms, 10% THD
Operating Temp Range .. +60 to -20 deg C

TRANSMITTER:

50 Watts 2M, 40 Watts 70cm
(3W Low, 10W Medium selectable)
Reactance Modulation
Spurious Emissions greater than 60dB
Nominal Frequency Deviation 3.5 KHz
Maximum Frequency Deviation 5.0 KHz
Frequency Stability +/- 0.001%
Transmit Power Consumption (approx)
with 13.8 +/-15% VDC input:
TX High 146 MHz: 10.5 A
440 MHz: 9.5 A

STANDARD PIONEERS ANOTHER FIRST!! THE C5718DA IS PACKET READY.

Designed with packet in mind. Out-of-the-box high-speed, 9600 baud, interface for both VHF and UHF bands. Just connect your TNC to the C5718DA and you're on the high speed packet network. Also, operates at 1200 and 2400 baud equally well.

OPTIONAL ACCESSORIES

Additional accessories available from your dealer.

- CRC5700 removable front panel with twin frequency display.
- CAW570 split cable for mic.
- CAW571 2M mic extension cable.
- CAW572 4M mic extension cable.
- CAW573 2M extension cable for the front panel (CRC5700).
- CAW574 4M extension cable for the front panel (CRC5700).
- CAW575 extra 12 volt power cable
- CAX5700 blank front cover
- CMB5700 mount for CRC5700
- CMB5710 mounting bracket for CMB5700
- CMP842 Microphone used with CRC5700
- CMU181 40 channel chip
- CMU182 200 channel chip
- CSK12 Matching Speaker

For more information on this and other STANDARD products, please contact your nearest STANDARD dealer.

Standard Amateur Radio Products, Inc.

P.O. Box 48480

Niles, Illinois 60714

tel (312) 763-0081

fax (312) 763-3377



Everything you need's in the speaker/mic... *and* it delivers 50 watts, too!



A full featured 2-meter rig that fits anywhere, yet puts out a full 50 watts as well — that's Standards new C1208DA! With all controls and the large liquid crystal display in the speaker/mic, this rig can mount anywhere — no more compact car woes! The rig's under the

seat, behind the dash, or in the trunk (with optional extension cable) — all you need is in your hand. All this, plus it's packet ready (up to 9600 baud) and includes wide range (100-200 and 250-520 MHz) receive, including AM aircraft.

HERE'S WHAT THE C1208DA GIVES YOU:

FREQUENCY RANGE:

Transmit: 144-148 MHz; CAP/MARS mod available

Receive: 100-199.995 plus 250-519.995 MHz, FM or AM

POWER OUTPUT:

50, 10 or 3 W, selectable

INTERMOD REJECTION:

None better!

MEMORIES:

100; stores frequency, offsets and CTCSS tones

CTCSS ENCODE/DECODE:

Built in!

DTMF AUTO DIALING:

10 memories of 15 digits each

PACKET READY:

1200, 2400 and 9600 baud!

FREQUENCY STEPS:

5, 10, 12.5, 15, 20, 25, 50 or 100 kHz

SCANNING:

6 modes, including priority and CTCSS

AUDIO MUTE:

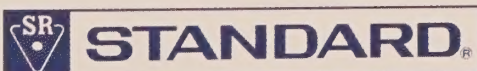
-10, -20, -30 or -40 dB, programmable

All this, yet the C1208DA is only 5.5x1.2x5.8 inches, weighs only 1.65 lbs., and includes a quiet built-in cooling fan. Mobile mounting bracket and 9-foot (3 meter) power cord also included.

BE-HAM SPECIAL



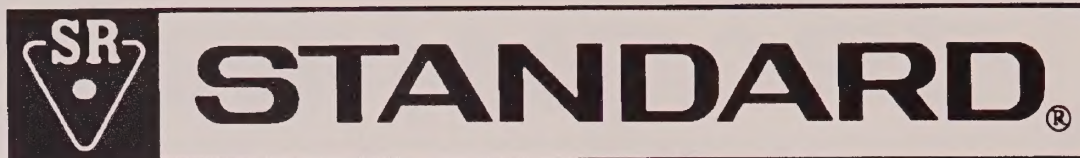
For more information on the C1208DA or any Standard products, please contact your Standard dealer. Specifications, features and price are subject to change without obligation or notice.



STANDARD Amateur Radio Products, Inc.
P.O. Box 48480
Niles, Illinois 60714
Tel. (312) 763-0081 Fax (312) 763-3377

C1208DA ACCESSORIES:

| | |
|--------|-----------------------------------|
| CAW560 | Split cable for mic |
| CAW561 | 6' (2 meter) mic extension cable |
| CAW562 | 12' (4 meter) mic extension cable |
| CSA12 | External speaker |
| CAW575 | 15' (5 meter) power cable |
| CAW576 | 9' (3 meter) power cable |



SPECIFICATIONS STANDARD C1208DA 2 METER BAND MOBILE TRANSCEIVER WITH FULL REMOTE CONTROL MICROPHONE

GENERAL:

Frequency Range
Receiver: 110 to 199.995 MHz
250 to 519.995 MHz
(including AM aircraft)
Unsurpassed intermod rejection.
Built in Antenna Duplexer for both bands
100 memories: stores frequency, offsets, and CTCSS tones
CTCSS Encode\Decode standard.
Frequency steps: 5, 10, 12.5, 15, 20, 25, 50 and 100 kHz
Paging and Coded squelch
DTMF autopatch dialing: 10 memories per band,
15 digits
Six kinds of scan: including priority and CTCSS
Back-lit Keypad and Display
Cooling fan built-in.
Size: 5.51"W x 1.18"H x 5.79"D
Weight: 1.65 lbs
Mobile bracket and power cord 9 ft. (3M) included
MARS and CAP modification available permit required

RECEIVER:

Receiver Double Conversion
Superhet
First IF 23.05 MHz
Second IF 455 kHz
Sensitivity (amateur bands) 0.158 μ V for 12dB
SINAD
Squelch Sensitivity Threshold: .. 0.112 μ V
Selectivity (2 signal method): 60dB
Signal-to-noise ratio: 30 dB or better
Audio Output: 2 Watts into 4 ohms,
10% THD
Operating Temp Range: +60 to -20 deg C

TRANSMITTER:

Power output 50 Watts
3W Low, 10W Medium
Modulation Reactance
Spurious Emissions ... Greater than 60dB
Nominal Frequency Deviation 3.5 kHz
Maximum Frequency Deviation 5.0 kHz
Frequency Stability +/- 0.001%
Transmit Power Consumption (approx) with
13.8 +/-15% VDC input:
TX High: 10.5 A

STANDARD PIONEERS ANOTHER FIRST!! THE C1208DA IS PACKET READY.

Designed with packet in mind. Out-of-the-box high-speed, 9600 baud, interface for 2 Meters. Just connect your TNC to the C1208DA and you're on the high speed packet network. Also, operates at 1200 and 2400 baud equally well.

OPTIONAL ACCESSORIES

Additional accessories available from your dealer

- CAW560 Split cable for mic
- CAW561 6 ft. (2M) mic extension cable
- CAW562 12 ft. (4M) mic extension cable
- CAW575 Extra 12 volt power cable 15 ft. (5M)
- CAW576 Extra 12 volt power cable 9 ft. (3M)
- CSK12 Matching Speaker
(cable lengths are approximate)

For more information on this and other STANDARD products, please contact your nearest STANDARD dealer.
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Niles, Illinois 60714
tel (312) 763-0081
fax (312) 763-3377

WORLD'S SMALLEST TRI-BAND HANDHELD **C568A**

NEW
Tri-Band HT!
"3 Radios In One!"

GET A GRIP. GET IN STYLE!

Tri-Band
Antenna

Two Volume & Squelch
knobs for better control

Only STANDARD has six twin receive & transmit configurations: (2m-70cm) (70cm-2m) (2m-2m) (70cm-70cm) (2m-23cm) and (70cm-23cm) with main band on left of right side.

2 meter - 70 cm

70cm - 2 meters

70cm - 23 cm

Easy to use
large keypad

Same battery style as C178A:
CNB171 7.2v 700mAh
CNB172 12v 600mAh
CNB173 7.2v 1000mAh

Specifications

- Frequency Coverage: RX VHF 110-199 MHz, TX 144-148 MHz, RX UHF 340-499 MHz, TX 438-450 MHz, RX 1200-1300 MHz, TX 1240-1300 MHz
- Freq steps, 5, 6.25, 10, 12.5, 15, 20, 25 and 30 kHz
- Selectable Sub-Band TX Mute
- Built in CTCSS Encode/Decode
- Versatile Scanning: Pause, Busy or Hold
- Scan Memory Channel Lock-in
- CTCSS Tone Search
- DTMF Paging and Coded Squelch
- 4 Auto Dial Memories
- Automatic Power Off
- Battery Save, adjustable
- AM Aircraft receive (VHF)
- Programmable Key
- 4 power levels: H, M, L & EL (1.2 GHz -EL power only)
- Direct Frequency Input with Keypad
- Cross Band Repeat
- Unsurpassed Intermod Rejection
- Full Cross-Band Duplex operation

ACCESSORIES

All STANDARD Speaker/Mic.
All STANDARD Headsets
200 Channel Memory Chip

STANDARD has reinvented the TWIN BAND Mini-HT: Introducing the C568A TRI-BAND Transceiver.

This Mini-HT has the superior RF features you expect from STANDARD: unparalleled intermod rejection, outstanding extended receive, and now the added excellence of a 30 selection menu driven TRI-BAND Transceiver!

The C568A puts the power of a full featured handheld radio at your finger tips. Switch from transmitting on 2 Meters to 70 CM with the touch of the "MAIN" button, listen to the melody,...or...The C568A uses CW code tones, with the MAIN band identifier, to distinguish the MAIN band: dit dit dit dah for VHF and dit dit dah for UHF - an excellent reminder for your MAIN band. While using the UHF side of the C568A, make the easy switch from 70 CM to 1.2 GHz. by pushing the number 2 on the keypad. The "smart" software in the C568A automatically puts the number 12 on the display, so that you can continue inputting your frequency selection.

Don't be deceived by the size of the C568A. It may be small, but there is nothing left out. STANDARD has designed a full size keypad with buttons that are easy to read and use. Also, note STANDARD'S optional output power of 5 watts, with the 12 volt battery or adapter, EL power for 1.2 GHz.

STANDARD is the leader in innovations...for you!



STANDARD®

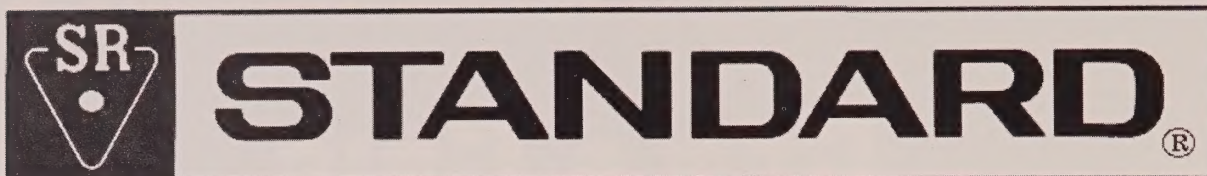
**STANDARD'S
ON THE WEB!**



[HTTP://WWW.STDRADIO.COM](http://www.stdradio.com)

STANDARD is the world's largest manufacturer of VHF-UHF Amateur Radio Equipment. For further information contact your Standard dealer or call **(312)763-0081 FAX (312)763-3377** Standard Amateur Radio Products, Inc. P.O. Box 48480 Niles, Illinois 60714

* Modifications for MARS/CAP transmit require an appropriate license. Specifications, features and price are subject to change without obligation or notice.



SPECIFICATIONS C568A 2 Meter / 70cm / 23cm Hand-held

GENERAL:

Frequency band: 2 Meters - 70 cm - 23 cm
Receive range: (approx) 110-199.995 (left & right)
310-399.995 (left band) 345-399.995 (right band)
400-499.995 (left band) 400-485.000 (right band)
1200-1299.990 (right band)
AM programmable and auto detect for VHF aircraft band
Antenna: 1/4 wavelength 2M & 70 cm,
1/2 wavelength 23 cm
Frequency step, minimum: 5 kHz 2M/70cm 10 kHz 23cm
Modulation type: F3
External input voltage range: 5 to 16 VDC
Microphone input impedance: 600 ohms
Standard NiCad battery pack: 7.2 V, 700 mAh (CNB171)
Size (approximate):
5.3"H x 1.85"W x 1.34"D (with batt., w/o protrusions)
Weight (approximate):
without battery and antenna: 6.7 oz
with battery and antenna: 13.76 oz
Memory channels: 40 + VFO and CALL, 200 ch with CMU161
Sub-audible tone: 39 CTCSS encode/decode included
Paging function, also DTMF squelch: Yes
Battery Save, 8 steps - 0.25/0.5/0.75/1/1.5/2/3/5 seconds
Auto Power-off mode: Yes
Unsurpassed intermod rejection Yes

TRANSMITTER:

Frequency range: 144-147.995 / 438-449.995 MHz
..... 1240.0-1299.990 MHz
Frequency deviation: 3.5 KHz (nominal), 5.0 KHz (max.)
Frequency modulation type: Reactance
Internal microphone: Electret capacitor
Power output 2M/70cm (13.8V)
.... 5W (H), 2.5W (M), 350mW (L) approx.
Standard battery, 7.2V 700 mAh: (H) 2.5 Watts approx
Power output 23 cm 35mW approx
Spurious signal ratio: greater than -60dB
Current drain, Transmit (13.8 VDC input):
..... 1.3A 5W, 950mA 2.5W, and 480mA 350mW approx
MARS and CAP mods: Yes
Available from your dealer (copy of license req'd)

RECEIVER:

Receiver: Double Conversion Superhet
First IF: VHF 21.80 MHz UHF 23.05 MHz
Second IF: 455 KHz Left 450 Right
Sensitivity (ham bands): 0.16 uV for 12dB SINAD
Signal-to-noise ratio (at 0.5uV input): 30dB or better
Squelch sensitivity: 0.1 uV
Speaker impedance: 8 ohms
Audio output (into 8 ohms): 250mW, 10% THD
Current drain (squelched two bands): 68mA
(battery save mode two bands): 28mA
Single band 37mA VHF, 48mA UHF, 52mA 23cm
Scan: Pause, Busy and Hold ... 7 scan modes: 1 MHz, Band,
Program, Memory, Block memory, Memory scan memory
and Tone frequency
Dual watch: VFO and Call channel, Memory Channel 00 or
Memory scanning, VFO and Memory Channels

OPTIONAL ACCESSORIES:

- CAW150 Mobile power cable with cigarette lighter plug
- CAW151 Base station power cable
- CAW152 Mobile cable, cigarette lighter plug & noise filter
- CAX03 Bottom cover
- CBT171 Battery case, (6 cells)
- CHP111 Headset microphone
- CHP150 VOX microphone
- CLC560 Std carrying case for CBT171 & CNB171 NiCad battery
- CLC561 Large carrying case for CNB172/173 NiCad battery
- CLC562 Hard carrying case for CBT171 & CNB171
- CLC555GN Green pouch
- CLC555OR Orange pouch
- CMB112 Mobile bracket
- CMB600 Helmet clip for CHP150
- CMC150 Mobile charger for CNB171 and CNB173 battery
- CMP111 Speaker microphone
- CMP113 Tie pin microphone
- CMP115 Mini speaker microphone
- CMP123 Ear-Microphone
- CMU161 200 channel memory
- CNB171 7.2V 700 mAh NiCad battery
- CNB172 12V 600 mAh NiCad battery
- CNB173 7.2V 1100 mAh NiCad battery
- CSA181A Rapid Desk charger

Specifications are guaranteed within the U.S. amateur bands. All specifications (other than F.C.C. type acceptance specifications) are nominal. STANDARD reserves the right to discontinue products and change specifications at any time without incurring any obligation to incorporate new features into products previously sold. All products carry a full one year limited warranty from time of purchase. Issued February 15, 1995.

For information on this and other STANDARD products, please contact your nearest STANDARD dealer.

Standard Amateur Radio Products, Inc.
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PH (312) 763-0081 Fax (312) 763-3377

AMATEUR RADIO SERIES

C558 *Series* **TWIN BANDER**

**VHF/UHF FM
TWIN BAND HANDHELD
TRANSCEIVER**

**SUPER-COMPACT SIZE TWIN BANDER
DTMF PAGING/CODED SQUELCH/CLONE
TWIN BAND SCANNING
CROSS-BAND OPERATION
BUILT-IN AM RECEIVER
OPTIONAL 200-CHANNEL MEMORY AVAILABLE**



STANDARD®

C558 TWIN BANDER

Series

VHF/UHF FM HANDHELD TRANSCEIVER

STANDARD's new 2 Meter-70 CM twin band handheld; the C558 offers new features that go beyond the competition. These new advanced features are both practical and convenient to the user. The C558's design includes an extremely advanced engineering circuit that reduces current drain from the battery.

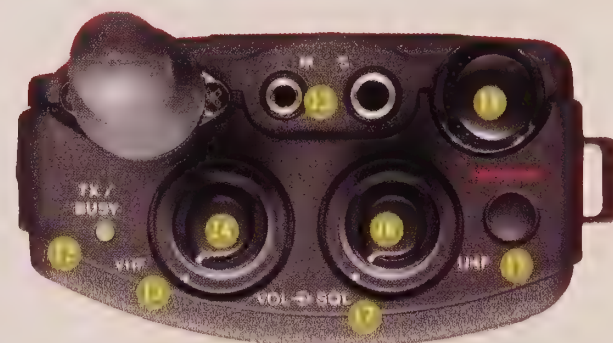
The C558 measures only 130 mm (5.13")/H x 55 mm (2.17")/W x 31 mm (1.22")/D including the battery case which holds 6 type AA batteries. When the battery case is removed the C558 is extremely small measuring only 74 mm (2.91") high. Twin band operation, VHF and UHF, are constructed into this compact body which provides features that are advanced over the competition. Make no mistake, this is the most advanced handheld of all. The C558 weighs only 355 g (12.52 oz.) including the 6 AA batteries.

ADVANCED CONTROL AND OPERATION

A separate volume and squelch control is provided for smooth operation of each band. The operation of the STANDARD's twin band handheld is far superior to other dual band radios that provide single and common use of these controls. The LCD readout allows the visual observation of operating conditions of each band at a glance. Frequency, signal strength, memory channel numbers and other pertinent information are individually displayed on the LCD for each band. With the VHF frequency always displayed on the left of the LCD and the UHF always on the right, at a glance, you will always have complete operating information covering both VHF/UHF bands. The C558 can be used as a mono-band radio by turning off one side of the radio, conserving battery power, VHF or UHF your choice.

HOLD THIS RADIO IN YOUR HAND TO APPRECIATE IT'S POWER

SHOWN IN ACTUAL SIZE



- 1 Twin band antenna
- 2 Function key
- 3 PTT switch
- 4 Belt clip
- 5 Battery release
- 6 LCD window
- 7 Lamp key
- 8 Squelch off key
- 9 Numeric/Functional keyboard
- 10 Internal speaker/microphone
- 11 CBT151GY battery tray (provided with radio)
- 12 TX/Busy indicator
- 13 Waterproof cap for external mic/speaker jacks
- 14 VHF volume control
- 15 VHF squelch control
- 16 UHF volume control
- 17 UHF squelch control
- 18 Rotary channel selector
- 19 Power switch



SIMULTANEOUS RECEPTION

Simultaneous reception is possible on both VHF and UHF bands with the C558. It is also possible to receive on one band (sub-band) while transmitting on the main band (Full-duplex). Also provided is an audio mute feature that automatically turns off the sub-band audio output while transmitting on the main band. This feature is very desirable when working from one band to another.

3-WAY FREQUENCY SELECTION



Operating frequencies may be entered or changed in three ways with the C558:

- 1) By direct entry from the keyboard
- 2) By rotation of the rotary channel selector
- 3) By the frequency step with the up/down keys

BUILT-IN DTMF PAGING/CODED SQUELCH

The versatility of the C558 allows you to communicate with friends without interference from other stations. When called by paging mode, the C558 notifies the call station by beep sounds and displays the code number of the opposite station which made a call. Also, it is possible to call a single friend or use the group call function to call a prearranged group. The C558 allows you to combine Tone Squelch and Code Squelch functions. The combination virtually assures your receiver remains quiet until a call is made from a transceiver specifically set to the same code and CTCSS Frequency. This feature is especially useful when you do not wish to be interrupted by an unwanted signal. Optional CTN160 CTCSS unit is required.

INDIVIDUAL SCANNING

The C558 offers simultaneous reception of VHF and UHF bands also offers a simultaneous scanning capability. Scan mode can be programmed individually by band. Even if one band receives a signal and stops scanning during twin scan, the other band scanning continues. Three modes and five types of scanning are available with the C558.

200-CHANNEL MEMORY AVAILABILITY

A memory cartridge (CMU160, 4K EE-PROM) is provided with the radio and 40 channels of information (20 channels per band) can be stored. Optional CMU161 16K EE-PROM cartridge offers 200 channel memory capacity. These memory cartridges require no battery for backup. Several of these cartridges can be acquired making memory in the C558 available for different area you may visit. In each memory channel various information such as priority channel, paging code and tone frequency are storable with the transmit frequency. Memory protection function disables the normal change and deletion functions and assures the security of the memory data you have already programmed.

IMPROVED DISPLAY INFORMATION

23 program menus are available and displayed on the LCD when you need to make a program entry. This new feature allows you to make an easy and quick access to your desired mode.

INDIVIDUAL AUDIO OUTPUT

When an external speaker is connected to the C558 you can assign either audio output to the internal speaker and the other output to an external speaker. Normally both of the VHF/UHF audio outputs come from the internal speaker when no external speaker is connected.

OTHER FEATURES

10 different DTMF sequences of up to 15 digits can be stored into the C558. Transmit delay time and transmit interval are controllable.

Cross-band Repeater function is provided with the C558 enabling to communicate between 2 Meter and 70 CM bands simultaneously.

DTMF Clone Mode enables you to copy the contents of one C558 to another.

When DTMF Decode Mode is activated, the C558 decodes any paging codes that you may receive at paging operation.

The C558 allows you to temporally switch back to the initial mode without missing data you have programmed.

With the provided DC adaptor, the C558 accepts a wide voltage range, 6 to 16 volts, and is suitable for direct connection to the automobile 12 volts system. 12 volts DC input also provides 5 watt RF output.

7 frequency step: 5, 10, 12.5, 20, 25, 50 and 100 kHz are selectable so you can quickly find your desired frequency.

Capable of receiving Aviation band.



OPTIONAL ACCESSORIES



- A** CBT151GY Battery case (holds 6AA batteries)
- B** CNB150 Small size Ni-Cd battery pack (7.2 V, 400 mAh)
- C** CNB151GY Standard size Ni-Cd battery pack (7.2 V, 700 mAh)
- D** CNB152 Hi-power Ni-Cd battery pack (12 V, 600 mAh)
- E** CNB153 Long-life Ni-Cd battery pack (7.2 V, 1,000 mAh)
- F** CSA160E/A Desk top rapid charger (220 V AC/120 V AC)
- G** CSA181E/A Desk top rapid charger (220 V AC/120 V AC)
- H** CWC150E/A Wall charger for CNB150/151GY/153 (220 V AC/120 V AC)
- I** CMC150 Wall charger for CNB152 (220 V AC)
- J** CMC151 Mobile charger for CNB150/151GY/153 (220 V AC/120 V AC)
- K** CLC550 Carrying case (for use with CBT151GY or CNB151GY)
- L** CLC551 Carrying case (for use with CNB152 or CNB153)
- M** CLC555GN Pouch (Green)

- N** CLC555 OR Pouch (Orange)
- O** CMB111 Mobile bracket
- P** CTN160 CTCSS unit
- Q** CMU160 4K bit memory cartridge for 40 channel memory
- R** CMU161 16K bit memory cartridge for 200 channel memory
- S** CAW150 Mobile power supply cable-adaptor
- T** CAW151 Base power supply cable
- U** CMP111 Standard size mic-speaker
- V** CMP115 Small size mic-speaker
- W** CMP113 Tie-pin type microphone and earphone
- X** CHP111 Headset with PTT switch and boom microphone
- Y** CHP150 Headset with PTT/VOX switch and boom microphone (Powered type)

SPECIFICATIONS

GENERAL:

| | | VHF section | UHF section |
|--|-------------------|------------------------------------|--------------------|
| Frequency Range | C558 | 144 to 147.995 MHz | 430 to 439.995 MHz |
| (Specifications guarantee range) | C558A | 144 to 147.995 MHz | 438 to 449.995 MHz |
| | C558S | 144 to 145.995 MHz | 430 to 439.995 MHz |
| Circuitry | | Synthesized | |
| Type of Emission | | F3 | |
| Microphone Input Impedance | | 600Ω | |
| Operating Voltage Range | | 6 to 16 V DC (with CMA181) | |
| Operating Temperature Range | | -10°C to +60°C | |
| Current Drain | TX Hi (13.8 V) | 1.2 A | 1.3 A |
| | TX Mid (13.8 V) | 900 mA | 1.0 A |
| | TX Hi/Mid (7.2 V) | 850 mA | 1.0 A |
| | TX Lo | 400 mA | 480 mA |
| | Standby (mono) | 36 mA | 45 mA |
| | Standby (twin) | 70 mA | |
| | Bat. Save (mono) | 17 mA | 18 mA |
| | Bat. Save (twin) | 25 mA | |
| Auto-Power Off | | 0.2 mA | 0.2 mA |
| | | | |
| Channel Spacing | | 20 kHz | |
| Frequency Step | | 5, 10, 12.5, 20, 25, 50, 100 kHz | |
| Speaker Impedance | | 8Ω | |
| Dimensions [H×W×D mm (inch)] | | 55 (2.17) × 130 (5.12) × 31 (1.22) | |
| Weight (including antenna & batteries) | | 355 g (12.5 oz.) | |
| Tone Burst Frequency | | 1,750 Hz | |

TRANSMITTER:

| RF Power Output | Battery type | VHF | | | UHF | | |
|--------------------------------------|--------------|----------------------|------|-------|----------|------|-------|
| | | Hi | Mid | Lo | Hi | Mid | Lo |
| | CBT151GY | 2.0W | 2.0W | 0.35W | 1.5W | 1.5W | 0.35W |
| | CBT150 | 2.5W | 2.5W | 0.35W | 2.0W | 2.0W | 0.35W |
| | CNB151GY | 2.5W | 2.5W | 0.35W | 2.0W | 2.0W | 0.35W |
| | CNB153 | 2.5W | 2.5W | 0.35W | 2.0W | 2.0W | 0.35W |
| | CNB152 | 5.0W | 2.5W | 0.35W | 5.0W | 2.5W | 0.35W |
| Modulation Method | | Reactance Modulation | | | | | |
| Spurious Emission | | 60 dB | | | | | |
| Maximum Deviation | | ±5.0 kHz | | | | | |
| Harmonic Distortion (at 1 kHz) | | Less than 5% | | | | | |
| Frequency Stability (-10°C to +60°C) | | 0.001% | | | | | |
| Frequency Setting Accuracy | | ±1.0 kHz | | | ±1.5 kHz | | |

RECEIVER:

| Circuitry | | VHF section | UHF section |
|-------------------------------|--------|--------------------------|-------------|
| Intermediate Frequency | 1st IF | 21.80 MHz | 23.05 MHz |
| | 2nd IF | 450 kHz | 450 kHz |
| Sensitivity (12 dB SINAD) | | 0.158 μV | |
| Threshold Squelch Sensitivity | | 0.112 μV | |
| Selectivity (2-signal method) | | 55 dB | 50 dB |
| Audio Power Output | | 200 mW at 10% distortion | |
| S/N Ratio at 0.5 μV Input | | 25 dB | |

BATTERY LIFE

| (depends on operating & environmental conditions.) | CNB150 | CNB151GY | CNB152 | CNB153 |
|--|-----------------------------------|----------|--------|--------|
| | 2.5 hrs | 4.5 hrs | 3 hrs | 6.5hrs |
| | TX:RX:Standby=1:1.8/Hi-power mode | | | |

PERFORMANCE SPECIFICATIONS ARE NOMINAL, UNLESS OTHERWISE INDICATED, AND ARE SUBJECT TO CHANGE WITHOUT NOTICE.



Standard Amateur Radio Products, Inc.

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C188/C488 SERIES

**VHF/UHF FM
HANDHELD
TRANSCEIVER**

- LEAN BODY AND LIGHT WEIGHT
- 200 CHANNEL MEMORY CAPACITY
- CODE SQUELCH/TONE SQUELCH
- WAKEUP FEATURE
- VARIOUS SCAN MODES
- SUB-VFO FEATURE
- NO BACK-UP BATTERY REQUIRED



STANDARD®

C188/C488 SERIES

VHF/UHF FM HANDHELD TRANSCEIVER



Again, STANDARD has successfully designed and built a new series of handheld transceivers with powerful enhancements that still exhibit simple operation.

The C188/C488 VHF or UHF FM handheld allows you to appreciate either simple or sophisticated operation. Compared to our earlier models, the operation has become even easier. The performance, features and simple operation of the C188/C488 with its new enhancements are more notable than any other handheld transceivers.

NEW HANDHELDS BORN FROM HUMAN ENGINEERING

HIGH EFFICIENCY AND WIDE VOLTAGE OPERATION

Enhancements in the basic engineering design, now yield greater overall radio performance. This is especially noteworthy in the new design concepts of "HEC" High Efficiency Circuitry improvements.

STANDARD's new "HEC" achieves high performance at lower operating voltages. Efficiency of the RF-power verses voltage at the final amplifier stage of the C188/C488 is approximately 20% improved as compared to our previous handheld transceivers.

As a result, the C188/C488 works from a 4.8 volts DC source as the rated voltage. This allows the handheld transceiver to operate from 4×AA batteries.

LEAN BODY AND LIGHT WEIGHT

The C188/C488 are trully small handhelds, providing just-fit operation in your palm. It measures 122 mm (4.8")/H×58 mm (2.3")/W×26.5 mm (1.04")/D. Weight is only 280 g (9.88 oz.) including antenna and 4×AA batteries. The lean body and light weight allow you to go anywhere putting it into your shirt pocket.

UNSURPASSED MEMORY CAPACITY

The C188C/C488 uses a tiny 16 K EE-PROM memory cartridge which requires no battery for backup. 200 channel memory capacity allows you to individually store your desired frequencies together with specific modes of *tone encode, *tone squelch, paging, code squelch, repeater, offset frequency, *tone frequency and scanning.

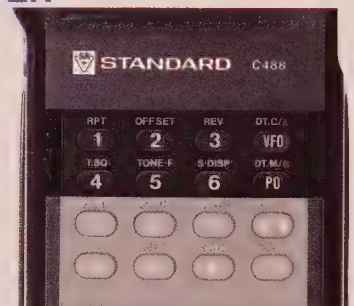
**Optional CTN181 CTCSS unit is required.*

IMPROVED DISPLAY INFORMATION

Information displayed on the LCD window of the C188/C488 has made it even easier to operate our new radios. Offset frequency, tone squelch frequency, paging code, APO (Automatic Power Off) status and wakeup code are shown along with memory channel number and carrier frequency.

BUILT-IN KEYBOARD UNDER THE SLIDE-COVER

Once the user stores all the information into the memory channels by the keyboard underneath the slide-cover, operation of the C188/C488 can be done simply by pressing the required keys on the front panel.



WAKEUP FEATURE TURNS THE RADIO ON AUTOMATICALLY

The C188/C488 has a special feature called wakeup mode. You can receive a specific call from another station even if the power switch is in the off position. Current drain in the wakeup mode is only 3 mA (battery save mode is 12 mA). In the wakeup mode, a beeping sound is generated upon receiving a call. The wakeup feature utilizes DTMF signalling and a specific wakeup code is provided in a programmable 4 digit code. In this mode, a "W" is displayed on the LCD even when the power switch is in the off position. Once the power switch is turned on, the wakeup mode is cancelled. The transmit frequency and wakeup code must coincide between both radios. A simple wakeup mode and PTT sends wakeup code over the air.

The C188/C488 transmits the wakeup code information within 3 seconds after transmission of the carrier. This feature can be used with the APO (Auto Power Off) feature and results in additional battery saving.

CODE SQUELCH/TONE SQUELCH

The versatile C188 and C488 Transceivers permit you to combine Tone Squelch (Option) and Code Squelch functions. The combination virtually assures your receiver remains quiet until a call is made from a transceiver specifically set to the same code and CTCSS frequency.

EASY AND QUICK TO ADDRESS/STORE MEMORY CHANNEL

To simplify and manage the large memory capacity of the C188/C488, a new innovative method of storing memory channels is innovated. Let the radio's microcomputer do the work for you. Vacant memory channels are automatically scanned and located. This feature makes it very convenient to automatically save a large number of channels. If you desire, individual memory channel assignment is a thing of the past.

DTMF MEMORY

The C188/C488 is designed with 10 different DTMF memories, each accommodating up to 15 digits. With just the touch of a key, these pre-programmed DTMF memory locations can be activated. Redial capability is included and all features may be used without keying the transmitter.

SUB-VFO FEATURE

The C188/C488 temporarily enables you to alternately switch between two different VFO frequencies. It is convenient to search for an unoccupied frequency with one VFO while being able to return to the other VFO for transmitting.

VARIOUS SCAN MODES

The C188/C488 offers 3 modes and 7 types of scans:

| | | |
|------|-------------|--|
| SCAN | VFO SCAN | Scan the entire band Scan within a 1 MHz segment Scan within a specified range |
| | MEMORY SCAN | Scan all memory channels Scan a specified memory block Scan specified memories |
| | DTCSS SCAN | Scan tone frequencies |

ACCESSORIES PROVIDED WITH RADIO

| ITEM/VERSION | C188/C488 | C188S/C488S | C188A/C488A |
|----------------|-----------|-------------|-------------|
| BELT CLIP | • | • | • |
| HAND STRAP | • | • | • |
| CBT181 | • | • | |
| CNB184 | | | • |
| CWC150A | | | • |
| CCA181 | | | • |
| CTN181 | | | • |
| CMU181 | | | • |
| CMU182 | • | • | |
| OWNER'S MANUAL | • | • | • |

SHOWN IN ACTUAL SIZE



- | | |
|----------------------------------|---------------------------------|
| 1 Function key | 11 Internal Speaker/microphone |
| 2 PTT switch | 12 Numeric/Function key-board * |
| 3 Call/Wakeup key | 13 Memory cartridge |
| 4 Lamp key | 14 Antenna connector |
| 5 Squelch off key | 15 External microphone jack |
| 6 Belt clip | 16 External speaker jack |
| 7 Memory scan/Frequency lock key | 17 Power switch/Volume control |
| 8 VFO/Memory channel/Enter key | 18 TX/Busy indicator |
| 9 Paging/Code squelch key | 19 Rotary channel selector |
| 10 LCD | |

| Key | Function (activated when press with FUNC key) |
|-------------|---|
| 1 | Toggles repeater mode on/off |
| 2 | Recalls offset frequency at repeater mode |
| 3 | Reverses TX and RX frequency at repeater mode |
| 4 | Toggles tone squelch on/off |
| 5 | Recalls tone frequency |
| 6 | Selects information indicated in sub-display |
| 7 | Toggles dual watch on/off |
| 8 | Initiates scanning |
| 9 | Recalls 4-digit code for wakeup |
| 0 | Recalls set mode |
| VFO DT.C/A | Recalls DTMF code |
| PO DT.M/B | Toggles DTMF monitor on/off |
| MS.M STEP/C | Recalls frequency step |
| CLR.L/D | Toggles PTT lock on/off |
| * APO | Toggles automatic power off mode on/off |
| # SAVE | Toggles battery saver on/off |

OPTIONAL ACCESSORIES



- A** CBT181 Battery case (holds 4AA batteries)
- B** CBT182 Battery case (holds 5AA batteries)
- C** CNB181 Standard size Ni-Cd battery pack (4.8 V, 700 mAh)
- D** CNB182 Hi-power Ni-Cd battery pack (9.6 V, 600 mAh)
- E** CNB183 Long-life Ni-Cd battery pack (6 V, 1,100 mAh)
- F** CNB184 Mid-power Ni-Cd battery pack (6 V, 700 mAh)
- G** CSA181E/A Desk top rapid charger (220 V AC/120 V AC)
- H** CWC150E/A * Wall charger for CNB181/183/184 (220 V AC/120 V AC)
- I** CWC151K * Wall charger for CNB182 (220 V AC)
- J** CMC150 * Mobile charger for CNB181/183/184
- K** CCA181 Charging adaptor for CWC150/151 and CMC150
- L** CMA181 Mobile power supply cable-adaptor
- M** CMP111 Standard size mic-speaker
- N** CMP115 Small size mic-speaker
- O** CMP113 Tie-pin type mic-speaker
- P** CHP111 Headset with PTT switch and boom microphone
- Q** CHP150 Headset with PTT/VOX switch and boom microphone (Powered type)
- R** CTN181 CTCSS unit
- S** CMU181 4K bit memory cartridge for 40 channel memory
- T** CMU182 16K bit memory cartridge for 200 channel memory
- U** CLC181 Carrying case (for use with CBT181 or CNB181)
- V** CLC182 Carrying case (for use with CBT182 or CNB182/183/184)
- W** CMB111 Mobile bracket

* Optional CCA181 charging adaptor is required.

SPECIFICATIONS

GENERAL:

| | | C188 Series | C488 Series |
|---|--------------------|---|--------------------|
| Frequency Range | C188/C488 | 144 to 145.995 MHz | 430 to 439.995 MHz |
| (Specifications guarantee range) | C188S/C488S | 144 to 145.995 MHz | 430 to 439.995 MHz |
| | C188A/C488A | 144 to 147.955 MHz | 438 to 449.995 MHz |
| Circuitry | | Synthesized | |
| Type of Emission | | 16F3 | |
| Operating Voltage Range | | 4.0 to 15.0 V DC/6.0 to 16.0 V DC (with CMA181) | |
| Operating Temperature Range | | -10°C to +60°C | |
| Current Drain | | | |
| | TX Hi (13.8 V) | 1,100 mA | 1,200 mA |
| | TX Mid (13.8 V) | 950 mA | 950 mA |
| | TX Hi/Mid (4.8 V) | 750 mA | 750 mA |
| | TX Lo (13.8/4.8 V) | 300 mA | 300 mA |
| | Standby | 40 mA | 42 mA |
| | Battery Save | 12 mA | 12 mA |
| | A.P.O. | 2.5 mA | 2.5 mA |
| | Wakeup (w/B.S.) | 5.0 mA | 5.0 mA |
| | Wakeup (w/APO) | 0.9 mA | 0.9 mA |
| Channel Spacing | | 25 kHz | |
| Frequency Step | | 5, 10, 12.5, 20, 25 kHz | |
| Frequency Stability (-10°C to +60°C) | | ±0.001% | |
| Tone Burst Frequency | | 1,750 Hz (C188/C188S, C488/488S only) | |
| Speaker Impedance | | 8 ohms | |
| Microphone Input Impedance | | 600 ohms | |
| * Dimensions (H×W×D mm (inch)) | | 122 (0.48) × 58 (0.23) × 26.5 (0.11) | |
| * Weight | | 280 g (9.88 oz.) | |
| Battery life | | | |
| TX:RX:Standby=1:1:8 | with CBT181 | 3.5 hrs | 3.5 hrs |
| TX high power mode | with CBT182 | 3.5 hrs | 3.5 hrs |
| Battery saver off | with CNB181 | 6.5 hrs | 6 hrs |
| Battery life depends on operating and environmental conditions. | with CNB182 | 3.5 hrs | 3 hrs |
| | with CNB183 | 8 hrs | 8 hrs |
| | with CNB184 | 5.5 hrs | 5.5 hrs |

RECEIVER:

| | | C188 Series | C488 Series |
|--------------------------------------|--------|-------------|-------------|
| Intermediate Frequency | 1st IF | 44.95 MHz | 44.95 MHz |
| | 2nd IF | 455 kHz | 455 kHz |
| Sensitivity (12 dB SINAD) | | 0.158 μV | |
| Threshold Squelch Sensitivity | | 0.112 μV | |
| Selectivity (2-signal method) | | 55 dB | 55 dB |
| S/N Ratio at 0.5 μV Input | | 30 dB | |
| Audio Power Output (10% Distortions) | | 150 mW | |

TRANSMITTER:

| | | C188 Series | | | C488 Series | | |
|--------------------------------|-----------------|----------------------|------|-------|-------------|------|-------|
| RF Power Output | | Hi | Mid | Lo | Hi | Mid | Lo |
| | with CBT181 | 1.2W | 1.2W | 0.15W | 1.2W | 1.2W | 0.15W |
| | with CBT182 | 1.5W | 1.5W | 0.15W | 1.5W | 1.5W | 0.15W |
| | with CNB181 | 1.2W | 1.2W | 0.15W | 1.2W | 1.2W | 0.15W |
| | with CNB182 | 5.0W | 2.5W | 0.15W | 5.0W | 2.5W | 0.15W |
| | with CNB183/184 | 2.5W | 2.5W | 0.15W | 2.5W | 2.5W | 0.15W |
| Modulation Method | | Reactance Modulation | | | | | |
| Spurious Emission | | 60 dB | | | | | |
| Harmonic Distortion (at 1 kHz) | | ±3% | | | | | |
| Hum and Noise Level | | 40 dB | | | | | |
| Maximum Deviation | | ±5.0 kHz | | | | | |

* With CBT181 battery case

PERFORMANCE SPECIFICATIONS ARE NOMINAL, UNLESS OTHERWISE INDICATED, AND ARE SUBJECT TO CHANGE WITHOUT NOTICE.

For further information, see your dealer or contact.



STANDARD

Standard Amateur Radio Products, Inc.

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Here's
your
new
2-meter
hand-held...

...that
also
works
on
70 cm!



STANDARD'S C178A is a superb full-featured 2-meter rig — and it transmits and receives on 438-450 MHz as well! You get up to 5 watts output on 144-148 MHz, plus 50 mW out on the 70 cm band — plenty for hamfests or to work into nearby repeaters! All this, with Standard's unsurpassed performance and reliability.

LOOK AND COMPARE:

- 110-174 + 320-475 MHz receive (AM programmable for aircraft)
- 144-148 + 438-450 transmit (expandable for CAP, MARS)
- Best intermod rejection of any hand-held!
- Up to 5W out (4 programmable power levels) on 2 meters; 50 mW on 70 cm
- 40 memories, plug-in expandable to 200
- Dual frequency watch (4 modes)
- 7 scan modes; all programmable for Pause, Busy or Hold
- CTCSS encode/decode built-in
- Ten 15-digit DTMF memories
- DTMF Paging/Coded Squelch

Plus ... 2.3-15 VDC operation; 8-step battery save; call channel; one-touch squelch off; auto power off; PTT and keyboard lock; and much, much more!

For further information on the C178A or any of the many other fine Standard products, please contact your nearest Standard dealer today. Specifications, features and price are subject to change without obligation or notice.

STANDARD Amateur Radio Products, Inc.
P.O. Box 48480
Niles, Illinois 60714
Tel. (312) 763-0081 Fax (312) 763-3377

C178A Accessories:

- CAW150 Mobile power cable with cigarette lighter plug
- CAW151 Base station power cable
- CAW152 Mobile cable, cigarette lighter plug and noise filter
- CAX03 Bottom cover
- CBT171 Battery case (6 cell)
- CBT175 Battery case (2 cell)
- CHP111 Headset microphone
- CHP150 VOX microphone
- CLC171 Standard carrying case
- CLC172 Large carrying case
- CLC555GN Green pouch
- CLC555OR Orange pouch
- CMB112 Mobile bracket
- CMB600 Helmet clip for CHP150
- CMC150 Mobile charger
- CMP111 Speaker microphone
- CMP113 Tie pin microphone
- CMP115 Mini speaker microphone
- CMU161 200 channel memory
- CNB171 7.2V 700 mAh NiCad battery
- CNB172 12V 600 mAh NiCad battery
- CNB173 7.2V 1100 mAh NiCad battery
- CSA181A Rapid desk charger



STANDARD



SPECIFICATIONS C178A 2 METER-70 cm HAND-HELD

GENERAL:

Frequency band: 2 Meters - 70 cm
Frequency range: RX 110-174.995 & 320-474.995 MHz
(AM programmable for aircraft)
Frequency step, minimum: 5 kHz
Modulation type: F3
External input voltage range: 2.3 to 15 VDC
Microphone input impedance: 600 ohms
Standard NiCad battery pack: 7.2 V, 700 mAh (CNB171)
Size (approximate):
..... 4.88"H x 2.2"W x 1.2"D (with batt., w/o protrusions)
Weight (approximate):
without battery and antenna: 5.5 oz
with battery and antenna: 12.5 oz
Memory channels: 40 + VFO and CALL, 200 ch with CMU161
Sub-audible tone: CTCSS encode/decode included
Paging function, also DTMF squelch: Yes
Battery Save, 8 steps - 0.25/0.5/0.75/1/1.5/2/3/5 seconds
Auto Power-off mode: Yes
Clock timer: Display time, ON timer and OFF timer
Unsurpassed intermod rejection: Yes

TRANSMITTER:

Frequency range: 144-147.995 / 438-449.995 MHz
Frequency deviation: .. 3.5 KHz (nominal), 5.0 KHz (max.)
Frequency modulation type: Reactance
Internal microphone: Electret capacitor
Power output 2 Meter (12V) .. 5W (H), 2.5W (M), 350mW (L)
standard battery, 7.2V 700 mAh: (H) 2.0 Watts
Power output 70 cm: 50mW max
with CBT175 battery case: 20mW
Spurious signal ratio: greater than -60dB
Current drain, Transmit (13.8 VDC input):
..... 1A 5W, 800mA 2.5W, and 500mA 350mW approx
MARS and CAP mods: Yes
Available from your dealer (copy of license req'd)

RECEIVER:

Receiver: Double Conversion Superhet
First IF: 21.80 MHz
Second IF: 455 KHz
Sensitivity (ham bands): 0.16 μ V for 12dB SINAD
Signal-to-noise ratio (at 0.5 μ V input): 30dB or better
Squelch sensitivity: 0.1 μ V

Speaker impedance: 8 ohms
Audio output (into 8 ohms): 200mW, 10% THD
Current drain (squelched): 40mA
(battery save mode): 18mA
Scan: Pause, Busy and Hold: 7 scan modes: 1 MHz, Band, Program, Memory, Block memory, Memory scan memory and Tone frequency
Dual watch: VFO and Call channel, Memory Channel 00 or Memory scanning

OPTIONAL ACCESSORIES:

- CAW150 Mobile power cable with cigarette lighter plug
- CAW151 Base station power cable
- CAW152 Mobile cable, cigarette lighter plug & noise filter
- CAX03 Bottom cover
- CBT171 Battery case, (6 cells)
- CBT175 Battery case (2 cells)
- CHP111 Headset microphone
- CHP150 VOX microphone
- CLC171 Standard carrying case for CBT171 and CNB171 NiCad battery
- CLC172 Large carrying case for CNB172 and CNB173 NiCad battery
- CLC555GN Green pouch
- CLC555OR Orange pouch
- CMB112 Mobile bracket
- CMB600 Helmet clip for CHP150
- CMC150 Mobile charger for CNB171 and CNB173 battery
- CMP111 Speaker microphone
- CMP113 Tie pin microphone
- CMP115 Mini speaker microphone
- CMU161 200 channel memory
- CNB171 7.2V 700 mAh NiCad battery
- CNB172 12V 600 mAh NiCad battery
- CNB173 7.2V 1100 mAh NiCad battery
- CSA181A Rapid Desk charger

For more information on this and other STANDARD products, please contact your nearest STANDARD dealer.
Standard Amateur Radio Products, Inc.
P.O. Box 48480
Niles, Illinois 60714
tel (312) 763-0081
fax (312) 763-3377

Specifications are guaranteed within the U.S. amateur bands. All specifications (other than F.C.C. type acceptance specifications) are nominal. STANDARD reserves the right to discontinue products and change specifications at any time without incurring any obligation to incorporate new features into products previously sold. All products carry a full one year limited warranty from time of purchase. Revised January 7, 1994.

BE-HAM SPECIAL



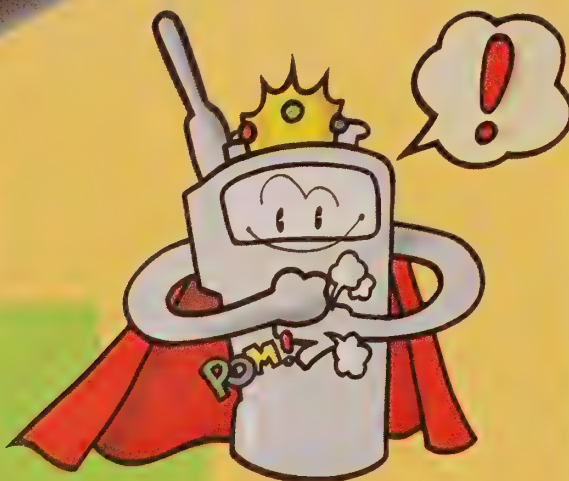
2 METERS IN YOUR SHIRT POCKET!



**Actual
size!**

FCC APPROVAL
PENDING

For more information on the C108A and other STANDARD products, please contact your nearest STANDARD dealer. Specifications, features and price are subject to change without obligation or notice.



Here's the tiniest hand-held Amateur transceiver ever offered! Standard's C108A is truly the rig you'll want to carry with you all the time. Its 200 mW output is ample for hamfests, picnics, conventions — or even for working nearby repeaters. With its 100-175 MHz receiver, you can also monitor the public service, marine and aircraft (AM detector) bands along with your favorite 2-meter frequencies.

JUST LOOK AT WHAT YOU GET WITH THE C108A:

- 100-174.995 MHz receive, FM or AM detector
- 200 mW Transmit Power
- 20 memories; stores frequency, offset and CTCSS tone
- CTCSS built-in; 23 tones available
- Scan modes: 1 MHz, Full Range, Memory, and Memory-Scan-Memory; programmable for Pause and Busy
- DC Power: 2 alkaline AA penlight cells

PLUS Battery Save and Auto Power Off, Keyboard Lock. The C108A measures only 2.3"x3.2"x1", weighs less than 5 oz.—get one for your shirt pocket today!

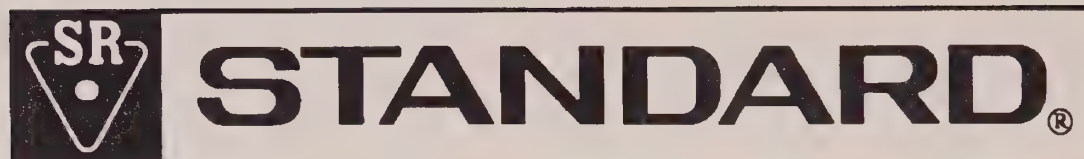
ACCESSORIES:

- | | |
|---------|-------------------------|
| CHP111 | Headset microphone |
| CHP150 | VOX microphone |
| CLC401 | Standard soft case |
| CLC402 | Deluxe soft case |
| CMP111 | Speaker microphone |
| CMP113 | Tie pin microphone |
| CMP115 | Mini speaker microphone |
| CNB401 | NiCad battery pack |
| CSA401A | NiCad battery charger |

Standard Amateur Radio Products, Inc.
P.O. Box 48480
Niles, Illinois 60714
Tel. (312) 763-0081 Fax (312) 763-3377



STANDARD[®]



SPECIFICATIONS C108A Single Band FM HT 2 Meter

GENERAL:

Frequency band: 2 Meters
Frequency range: RX 100-174.995 MHz
AM aircraft receive: Yes
Frequency step, minimum: 5 kHz
Size (approximate): 3.15"H x 2.28"W x 0.98"D
Weight (approximate): 4.90 oz
Memory channels: 20
CTCSS encode: 23 tones
Unsurpassed intermod rejection: Yes

TRANSMITTER:

Frequency range: 144-147.995 MHz
Frequency deviation: 3.5 kHz (nominal),
5.0 kHz (max.)
Frequency modulation type: Reactance
Frequency stability: +/- 0.001%
Power output (3V): 0.2W
Spurious signal ratio: greater than -55dB
Current drain TX, 2 x AA batteries approx: .. 0.22A
Internal tone frequencies available: 67.0, 71.9,
74.4, 77.0, 79.7, 82.5, 85.4, 88.5, 91.5, 94.8,
97.4, 100.0, 103.5, 107.2, 110.9, 114.8, 118.8,
123.0, 127.3, 131.8, 141.3, 151.4, 167.9 and
OFF

RECEIVER:

Receiver: Double Conversion Superhet
First IF: 21.80 MHz
Second IF: 455 KHz
Sensitivity (ham bands): 0.158 uV
for 12dB SINAD
Squelch sensitivity threshold: 0.112uV
Selectivity (2 signal method): 50dB
Signal-to-noise ratio (at 0.5uV input): 30dB or
better
Audio output (into 8 ohms): .. 0.1 Watts 10% THD
Operating temperature range: ... +60 to -10 deg C

OPTIONAL ACCESSORIES:

- CHP111 Headset microphone
- CHP150 VOX microphone
- CLC401 Standard soft case
- CLC402 Deluxe soft case
- CMP111 Speaker microphone
- CMP113 Tie pin microphone
- CMP115 Mini speaker microphone
- CNB401 NiCad battery pack
- CSA401A NiCad battery charger

For more information on this and other STANDARD products, please contact your nearest STANDARD dealer.
Standard Amateur Radio Products, Inc.
P.O. Box 48480
Niles, Illinois 60714
tel (312) 763-0081
fax (312) 763-3377

Specifications are guaranteed within the U.S. amateur bands. All specifications (other than F.C.C. type acceptance specifications) are nominal. STANDARD reserves the right to discontinue products and change specifications at any time without incurring any obligation to incorporate new features into products previously sold. All products carry a full one year limited warranty from time of purchase. Revised March 1, 1994.

GRIP IT. LIVE IT.

New Dual Band!
Wide band HT!
C508A

STANDARD has done it again!

Great radios come in small packages. First came the C108A - the tiniest 2m radio - operates on 2AA batteries and fits in your shirt pocket.

Next, GREATNESS evolved into the C508A the DUAL BAND big brother to the C108A - it too, fits in your shirt pocket and operates on 2AA batteries, and more... The C508A has 280mW of output (comparable to low power of most HT's operating on a nicad battery pack) adequate power to hit most local repeaters with its helical designed antenna.

Take it anywhere.

The C508A is perfect for HAMFESTS, picnics, hiking, or while using your mobile rig in cross-band repeat mode, for quick access to a distant repeater. Be confident that your carrying the BEST amateur radio - you've got a STANDARD. STANDARD has exceptional RF features, incredible extended receive capabilities and solid transmitting performance.

Specifications

- Frequency Coverage: 100-180 MHz
Approx. 340-400 MHz
400-480 MHz
- AM programmable for aircraft
- 60 memories + 2-VFO, 2-Call
- CTCSS 39 tones-Encode/Decode
- 22 menu selections
- RF squelch
- Freq steps, 5, 10, 12.5, 15, 20, 25, 30 and 50
- Scan types: Busy, Pause or Hold
Scan: 1 MHz, Entire band, Program, Memory, Specific memory frequencies, Block and CTCSS
- PTT and Frequency lock
- Keyboard lock
- Tone burst: 1750 Hz
- APO: Auto Power Off
- Battery save: 4 steps
- Auto power off: adjustable
- Output power: 280 mW
- Operates from 3V "2-AA"
- Size approx: 2.28" W, 3.35" L, 0.98" D
- * Weight approx: 5.65 oz

VHF & UHF IN YOUR SHIRT POCKET!!



EASILY PROGRAMMABLE
MENU DRIVEN SCREEN

ACCESSORIES

- CHP111 Headset microphone
- CHP150 VOX microphone
- CLC502 Standard soft case
- CMP111 Speaker microphone
- CMP113 Tie pin microphone
- CMP115 Mini speaker microphone
- CMP123 Ear speaker/mic
- CNB401 NiCad battery pack
- CSA401A NiCad battery charger

[HTTP://WWW.8TDRADIO.COM](http://www.8TDRADIO.COM)

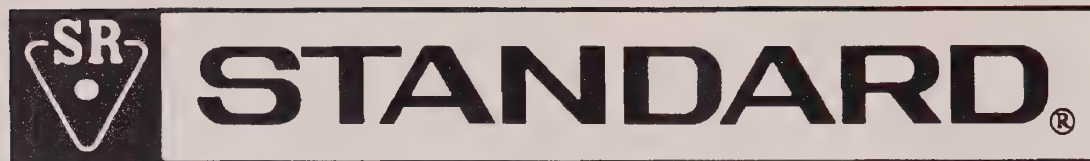
STANDARD is the world's largest manufacturer of VHF-UHF Amateur Radio Equipment. For further information contact your Standard dealer or call (312)763-0081 FAX (312)763-3377 Standard Amateur Radio Products, Inc. P.O. Box 48480 Niles, Illinois 60714

* Modifications for MARS/CAP transmit require an appropriate license.

Specifications, features and price are subject to change without obligation or notice.

STANDARD

TINIEST
HAND-HELD
C508A



SPECIFICATIONS C508A Dual Band FM HT 2 Meter / 70 cm

GENERAL:

Frequency band: 2 Meters / 70 cm
Frequency range approx.:RX 100-180, 340-400
400-480 MHz
AM aircraft receive Yes
Frequency step: 5, 10, 12.5, 15, 20, 25, 30 and 50 kHz
Size (approximate): 2.28" W, 3.35" L, 0.98" D
Weight (approximate): 5.65 oz
Memory channels: 60
CTCSS 39 tones-Encode/Decode
Menu driven: 22 menu selections
RF squelch Yes
Unsurpassed intermod rejection Yes
PTT and Frequency lock Yes
Keyboard lock Yes
Tone burst: 1750 Hz
APO: Auto Power Off

TRANSMITTER:

Frequency range: 144-147.995 438-449.995 MHz
Frequency deviation: 3.5 KHz (nominal), 5.0 KHz (max.)
Frequency modulation type: Reactance
Internal microphone: Electret capacitor
Power output (3V): 0.28W
Spurious signal ratio: greater than -40dB
Current drain TX, 2 x AA batteries approx. 280 mA

RECEIVER:

Receiver: Double Conversion Superhet
First IF: 23.05 MHz
Second IF: 450 KHz
Sensitivity (ham bands):
..... less than 0.22uV for 12dB SINAD
Signal-to-noise ratio (at 0.5uV input): ... 30dB or better
Squelch sensitivity threshold less than 0.2 uV
Audio output (into 8 ohms): 0.1 Watts 10% THD
Current drain (squelched) 36 mA approx.
(battery save mode) 11 mA approx.
Operating temperature range +60 to -10 deg C
Scan types: Busy, Pause or Hold
Scan: 1 MHz, Entire band, Program,
Memory, Specific memory frequencies,
Block and CTCSS
Battery save: 4 steps
Auto power off: adjustable

OPTIONAL ACCESSORIES:

- CHP111 Headset microphone
- CHP150 VOX microphone
- CLC502 Standard soft case
- CMP111 Speaker microphone
- CMP113 Tie pin microphone
- CMP115 Mini speaker microphone
- CMP123 Ear speaker/mic
- CNB401 NiCad battery pack
- CSA401A NiCad battery charger

Specifications are guaranteed within the U.S. amateur bands. All specifications (other than F.C.C. type acceptance specifications) are nominal. STANDARD reserves the right to discontinue products and change specifications at any time without incurring any obligation to incorporate new features into products previously sold. All products carry a full one year limited warranty from time of purchase. Revised April 15, 1995.

For information on this and other
STANDARD products,
please contact your nearest
STANDARD dealer.

Standard Amateur Radio Products, Inc.
P.O. Box 48480
Niles, Illinois 60714
PH (312)763-0081 Fax (312)763-3377

Standard's C5900DA

3 Bands...2, 70 cm, & 6 Meters!

One compact package!

STANDARD'S
ON THE WEB!



[HTTP://WWW.STDRADIO.COM](http://www.stdradio.com)



OPTIONAL ACCESSORIES

- CAW590 split cable for mic
- CAW591 3M extension cable for LCD display
- CAW592 5M extension cable with connection for mic and speaker
- CAW593 8M extension cable with connection for mic and speaker
- CMB5900 mounting bracket for display
- CMU161 200 channel memory chip

Size: 5.51"W 1.57"H 6.81"D
Weight=2.65 lbs.

MEMORIES

- 80 memories (each side); stores frequency, offsets, CTCSS tones and more
- Expandable 200 memories each side with optional, CMU161
- CTCSS Encode/Decode standard
- Frequency steps, 5, 6.25, 10, 12.5, 15, 20, 25, 30, 50 and 100 kHz.
- Paging/Coded squelch
- DTMF autopatch dialing, 12 memories, 6 per side, 15 digits
- Eight kinds of scan: 1 MHz, entire band, program, memory, block memory, program memory, memory scan memory and tone

DISPLAY

- Snap-on front display or remote the radio in the trunk or under the front seat
- Back-lit Keypad and Display
- MY key, store favorite function
- TX Time-Out-Timer 3, 5, 15 mins
- Auto power-off 3, 6, 9 hrs
- Auto mute opposite band -20dB
- Beep-tone off, low or high
- Cooling fan built-in.

Mobile bracket and power cord (2M) included

MARS and CAP modification available permit required
FCC Approval pending

What's the most compact, economical, full featured tri-band mobile?

Standard's C5900DA! 6 Meters as

well as 2 and 70 cm, with crossband repeat, remote operation with detachable front panel, or wireless remote control from your hand-held's DTMF pad! Plus 1200-9600 baud packet, priority hyper memories for your seven most used frequencies, and up- and down- load frequencies to the optional 200 channel extended memory chip - without a computer! And there's so much more - just review the specifications below...



Great in the car...

On the road in the RV...



Big signal in the Ham Shack!



STANDARD C5900DA FEATURES

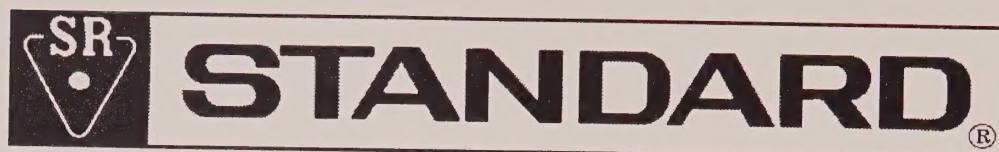
- Tested tough against intermod with Double Balanced Mixer (DBM) and Tracking Front-End
- DTMF remote control with HT
- Cross-band repeat, 6M, 2M and 70cm with CTCSS encode/decode
- Full Duplex cross-band operation with CTCSS encode/decode
- 7 priority hyper frequencies
- 1200-9600 packet interface
- Antenna Triplexer Built-in one antenna for all bands
- Dual-frequency display; left side 6M, 2M and 70cm, right side 2M and 70cm
- Frequency Receive Range:
Left band 44.000 - 99.995 MHz
100.000 - 225.000 MHz
240.000 - 530.000 MHz
Right band 100.000 - 200.000 MHz
260.000 - 510.000 MHz
550.000 - 1020.000 MHz*
(both including AM aircraft)
- 45 Watts 6M, 50 Watts 2M and 35 Watts 70cm (3W Low, 10W Medium selectable) transmit ham-bands

*cellular blocked on 800 MHz band



STANDARD

For more information on this and other STANDARD products, please contact your nearest STANDARD dealer. Specifications, price and features are subject to change without obligation or notice. Standard Amateur Radio Products, Inc. P.O. Box 48480, Niles, Illinois 60714. Tel (312) 763-0081 Fax (312) 763-3377



SPECIFICATIONS STANDARD C5900DA

TRI-BAND 6, 2 and 70 cm FM MOBILE TRANSCEIVER WITH DTMF REMOTE CONTROL

GENERAL

- Frequency Range:

| | | |
|------------|---------|---------------|
| Left band | 44.000 | 99.995 MHz |
| | 100.000 | 225.000 MHz |
| | 240.000 | 530.000 MHz |
| Right band | 100.000 | 200.000 MHz |
| | 260.000 | 510.000 MHz |
| | 550.000 | 1020.000 MHz* |

 (both including AM aircraft)
 - Dual-frequency display; left side 6M, 2M and 70cm right side 2M and 70cm
 - Tested tough against intermod with Double Balanced Mixer (DBM) and Tracking Front-End
 - 7 priority hyper frequencies
 - 1200-9600 packet interface
 - Antenna Triplexer Built-in one antenna for all bands
 - Memories: 80 memories (each side); stores frequency, offsets, CTCSS tones and more
 - Expandable 200 memories each side with optional, CMU161
 - CTCSS Encode/Decode standard
 - Frequency steps, 5, 6.25, 10, 12.5, 15, 20, 25, 30, 50 and 100 kHz
 - Paging/Coded squelch
 - DTMF autopatch dialing, 12 memories, 6 per band, 15 digits
 - Eight kinds of scan: 1 MHz, entire band, program, memory, block memory, program memory, memory scan memory and tone
 - Back-lit Keypad and Display
 - Auto mute opposite band on receive -20dB
 - Cooling fan built-in
 - Snap-on front display or remote the radio in the trunk or under the front seat
 - Full Duplex cross band operation with CTCSS tones.
 - DTMF remote control with HT
 - Cross-band repeat, 6M, 2M and 70cm with CTCSS encode/decode
 - MY key, store favorite function
 - TX Time-Out-Timer 3, 5, 15 mins
 - Auto power-off 3, 6, 9 hrs
 - Beep-tone off, low or high
 - Size: 5.51"W 1.57"H 6.81"D
 - Weight 2.65 lbs
 - Mobile bracket and power cable (2M) included
 - MARS and CAP modification available (permit required)
- *cellular blocked on 800 MHz band

RECEIVER

- Receiver Double Conversion Superhet
- Intermediate frequencies

| | | |
|------------|-------------|-----------|
| | 1st IF | 2nd IF |
| Left band | 50 MHz | 44.95 MHz |
| | 144/450 MHz | 44.95 MHz |
| Right band | 144/450 MHz | 23.05 MHz |
- Sensitivity (within amateur bands)

| |
|--|
| Less than 0.251 uV (50.000-53.995 MHz) |
| Less than 0.224 uV (144-147.995 MHz) |
| Less than 0.251 uV (438.000-449.995 MHz) |
- Audio Output 2 Watts into 4 ohms, 10% THD
- Operating Temp Range +60 to -20 deg C

TRANSMITTER

- 6 Meters 45 Watts
- 2 Meters 50 Watts
- 70 cm 35 Watts
- (3W Low, 10W Medium selectable)
- Type of Emission F2 and F3
- Antenna Impedance 50 ohms
- Spurious Emissions greater than 60dB
- Nominal Frequency Deviation 3.5 KHz
- Maximum Frequency Deviation 5.0 KHz
- Frequency Stability +/- 4ppm
- Microphone input impedance 600 ohms
- Transmit Power Consumption (approx) with 13.8 +/-15% VDC input:

| | | |
|----------|------|---------|
| 50 MHz | High | <12.00A |
| | Mid | <5.85A |
| | Low | <4.35A |
| 144 MHz | High | <12.00A |
| | Mid | <5.85A |
| | Low | <4.35A |
| 450 MHz | High | <11.00A |
| | Mid | <5.85A |
| | Low | <4.35A |
| Stand-by | | <0.75A |

THE C5900DA IS PACKET READY.

Designed with packet in mind. Out-of-the-box high-speed, 9600 baud, interface for all three bands. Just connect your TNC to the C5900DA and you're on the high speed packet network. Also, operates at 1200 and 2400 baud equally well.

OPTIONAL ACCESSORIES

Additional accessories available from your dealer.

- CAW590 split cable for mic
- CAW591 3M extension cable for LCD display
- CAW592 5M extension cable with connections for mic and speaker
- CAW593 8M extension cable with connections for mic and speaker
- CMB5900 mounting bracket for display
- CMU161 200 channel memory chip
- CSK12 Matching Speaker

For more information on this and other STANDARD products, please contact your nearest STANDARD dealer.

STANDARD AMATEUR RADIO PRODUCTS, INC.

P.O. Box 48480 Niles, Illinois 60714
Tel (312) 763-0081 Fax (312) 763-3377

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C156A

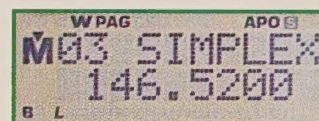
**STANDARD'S QUALITY!
STANDARD'S FEATURES!
EVERYBODY'S PRICE!**

Standard's new C156A is indeed a hand-held that everyone can afford, yet it boasts all the user-friendly features that Standard users have come to expect. Take a look at the bright, clear Dot-Matrix display, with alpha-numeric ID as well as frequency, then look at these other features: • 100 Memory Channels plus CALL and VFO • CTCSS - 39 tones built-in • Battery Save 1, 2, 3, 4 or 5 Sec • Auto-Power-Off 30, 60, 90 or 120 min • Dual Watch mode • Scan - 1 MHz, All, Program, Memory, Block memory, Memory Scan Memory and CTCSS (with optional CTN115) and much, much more! Comes with "AA" penlight cell pack, so you need never run out of battery. All this in a Standard - for under \$200! See your Standard dealer today and you'll go home with a C156A in your pocket!

SPECIFICATIONS

- Frequency Coverage
VHF RX 135.000-174.000 MHz
TX 144.000-147.995 MHz*
- Frequency steps, 5, 10, 12.5, 15, 20, 25, 30 and 50 kHz
- Scan: Pause, Busy or Hold
- Store: Alpha-Numeric Titles, Repeater, Offset frequency,
- Paging, Code Squelch, Tone Encode; Tone Decode with optional CTN115
- Auto repeater offset
- Built-in 1750 Tone Burst
- PTT lock
- Keyboard lock
- Auto Squelch 8 settings
- TX Time-Out Timer
- Paging/Code Squelch
- Wake-up receive mode
- 9 DTMF memories
- 3 power levels: H, M, L
- Back-lighted display
- DTMF Paging and Coded Squelch
- Direct Frequency Input with Keypad
- Unsurpassed Intermod Rejection
- Size approx: 2.28" W, 4.92" H, 1.02" D;
Weight approx: 10.6 oz
- C156A supplied with CBT156 dry battery case for 4 "AA" batteries. (batteries not included)

*CAP/Mars Transmit with appropriate Permit



OPTIONAL ACCESSORIES

- CAW151B Power Cable for Base Station
- CAW152B Mobile Cord with Noise Filter
- CHP111 Head Set with PTT
- CHP150 Head Set with VOX
- CLC155 Soft Case (CNB155/156)
- CLC156 Soft Case (CBT156)
- CLC157 Soft Case CNB157/CBT158
- CMB112 Mobile Bracket
- CMB600 Helmet Clip for CHP150
- CMC150 Mobile Charger (CNB155/156/158)
- CMP111 Speaker Microphone
- CMP113 Tie-pin Speaker Microphone
- CMP115 Small Speaker Microphone
- CNB155 4.8V 600 mAh Small Battery (1.8 Watt Output)
- CNB156 6.0V 600 mAh Standard Battery (2.8 Watt Output)
- CNB157 9.6V 600 mAh High Power Battery (5 Watt Output)
- CNB158 6.0V 1200 mAh Long-life Battery (2.8 Watt Output)
- CSA181AB Desk Top Charger
- CTN115 CTCSS Decode module
- CWC156A Wall charger (CNB155/156/158)
- CWC151A Wall charger (CNB157)



[HTTP://WWW.STDRADIO.COM](http://www.stdradio.com)

For more information on this and other STANDARD products, please contact your nearest STANDARD dealer. Specifications, price and features are subject to change without obligation or notice. Standard Amateur Radio Products, Inc. P.O. Box 48480, Niles, Illinois 60714.

Tel (312) 763-0081

Fax (312) 763-3377



SPECIFICATIONS

C156A 2 Meter Hand-held

GENERAL

Frequency band:2 Meters
Frequency range:RX 135-174 MHz (approx)
Frequency step:5, 10, 12.5, 15, 20, 25, 30 and 50 kHz
Modulation type:F2, F3
Dry battery case CBT156 supplied
 with C156A - uses 4 "AA"
Operating voltage (battery terminals)4 - 15 VDC
 (using external supply) DC 4.5 to 16 VDC
Microphone input impedance:500 ohms
Size (approximate): 2.28"W x 4.92"L x 1.02"D
 (with batt., w/o protrusions)
Weight (approximate):
 with battery and antenna:10.6 oz
Memory channels:100 + VFO and CALL
Sub-audible tone:39 CTCSS encode included
Paging function, also DTMF squelch:Yes
Battery Save1, 2, 3, 4, or 5 seconds
Auto Power-off mode:30, 60, 90 or 120 min
Unsurpassed intermod rejectionYes
Current (Approx) at 13.8V(Hi 5W) 1.3A
 (Mid 2.5 W) 1.0A
Current (Approx) at 6.0V(Hi 2W) 1.0A
 (Mid 2W) 1.0A
Current (Approx) at 13.8V/6.0(Low 0.35W) 400mA
Current in waiting (Approx)30mA
Current in Save 1.0 sec (Approx)12mA
Dot-Matrix LCD & Menu Display
The new easy-to-read alphanumeric dot-matrix LCD,
 displays functions and settings for all operations.
 Scroll through and read the menu choices with ease.

TRANSMITTER

Frequency range:144-147.995 MHz
Power output - High power position (all approximate)
CBT1561.8W
CNB1551.8W
CNB156/1582.5W
CNB1575.0W
 Output medium2.5W
 Output low0.35W
Modulation system:Reactance modulation
Frequency deviation: ..3.5 KHz (nominal), 5.0 KHz (max.)
Spurious signal ratio:greater than -60dB
Internal microphone:Electret condenser
MARS and CAP mods:Yes
 Available from your dealer (copy of license req'd)

RECEIVER

Receiver:Double Conversion Superhet
First IF:21.80 MHz
Second IF:455 KHz
Sensitivity (ham bands):0.158 μ V for 12dB SINAD
Signal-to-noise ratio (at 0.5 μ V input):30dB or better
Squelch sensitivity:0.1 μ V
Speaker impedance:8 ohms
Audio output (into 8 ohms):250mW, 10% THD
Message Function: A memorized message can be recalled
 when the selected message code is transmitted with the
 paging or wake-up code. There are a total of 19 messages,
 10 are fixed and 9 can be customized. The 10 fixed
 messages are as follows:

| | |
|---------------------|---------------------|
| 00 Emergency | 05 Decide! |
| 01 Call me! | 06 Where you're now |
| 02 Change frequency | 07 Will call later! |
| 03 Come together! | 08 Thank you! |
| 04 I'm late | 09 Bye Bye! |
| 10-18 customized | |

OPTIONAL ACCESSORIES

CAW151B Power cable for base station
CAW152B Mobile cord with noise filter
CHP111 Head Set with PTT
CHP150 Head Set with VOX
CLC155 Soft case (CNB155/156)
CLC156 Soft case (CBT156)
CLC157 Soft case CNB157/CBT158
CMB112 Mobile Bracket
CMB600 Helmet Clip for CHP150
CMC150 Mobile charger (CNB155/156/158)
CMP111 Speaker Microphone
CMP113 Tie-pin Speaker Microphone
CMP115 Small Speaker Microphone
CNB155 4.8V 600 mAh 1.8 watt small battery
CNB156 6.0V 600 mAh 2.8 standard battery
CNB157 9.6V 600 mAh 5 watt high power battery
CNB158 6.0V 1200 mAh 2.8 watt long-life battery
CSA181A Desk Top Charger
CTN115 CTCSS Decode module
CWC156A Wall charger (CNB155/156/158)
CWC151A Wall charger (CNB157)

Specifications are guaranteed within the U.S. amateur bands. All specifications (other than F.C.C. type acceptance specifications) are nominal. STANDARD reserves the right to discontinue products and change specifications at any time without incurring any obligation to incorporate new features into products previously sold. All products carry a full one year limited warranty from time of purchase.

For more information on this and other STANDARD products, please contact your nearest STANDARD dealer.
STANDARD AMATEUR RADIO PRODUCTS, INC. P.O.
Box 48480 Niles, Illinois 60714 Tel (312) 763-0081
Fax (312) 763-3377 *Specifications are guaranteed within the U.S. amateur bands. STANDARD reserves the right to discontinue products and change specifications at any time without incurring any obligation to incorporate new features into products previously sold. All products carry a full one year limited warranty from time of purchase.

